Section I (Amendments to the Claims)

Please amend claims 1 and 4 as set out in the following listing of the claims of the application. Please cancel claims 2 and 3, without prejudice.

1. (**Currently amended**) A *SGR* gene encoding a polypeptide comprising amino acid sequence having at least 60% homology with SGR domain I which is conserved amino acid sequence region of 49~207 among amino acid sequence of SEQ ID NO: 30, and inducing leaf yellowing by participating in chlorophyll catabolism during plant senescence, wherein the SGR gene encodes a polypeptide presented by the amino acid sequence selected from the group consisting of SEQ ID NOs: 30 to 58.

2. (**Cancelled**)

3. (**Cancelled**)

4. (**Currently amended**) The *SGR* gene according to claim [[3]]1, wherein the *SGR* gene comprises the DNA sequence selected from the group consisting of SEQ ID NOs:1 to ~~21 and 28~~29.

5. (**Withdrawn**) A polypeptide encoded by the *SGR* gene of claim 4.

6. (**Previously presented**) A recombinant vector comprising the *SGR* gene of claim 1.

7. (**Original**) A microorganism transformed with the recombinant vector of claim 6.

8. (**Previously presented**) A plant transformed with the *SGR* gene of claim 1.

9. (**Withdrawn**) A method for producing a stay-green mutant plant, which comprises mutating *SGR* gene of yellowing plants or fragments thereof.

10. (**Withdrawn**) The method according to claim 9, wherein the *SGR* gene encodes the polypeptide comprising amino acid sequence having at least 60% homology with SGR domain I

which is conserved amino acid sequence region of 49~207 among amino acid sequence of SEQ ID NO: 30.

11. **(Withdrawn)** The method according to claim 10, wherein the polypeptide comprises the chloroplast-targeting signal peptide sequence and SGR domain II, and/or SGR domain III which contains 2~6 conserved glutamines (Qs) in C-terminal region.

12. **(Withdrawn)** The method according to claim 10, wherein the *SGR* gene comprises the base sequence selected from the group consisting of SEQ ID NOs:1 to 21 and 28.

13. **(Withdrawn)** The method according to claim 9, wherein the *SGR* gene fragment comprises the DNA sequence selected from the group consisting of SEQ ID NOs: 21 to 29.

14. **(Withdrawn)** The method according to claim 9, wherein the mutating of *SGR* gene is carried out by deleting a part of base of said gene, substituting other singular or plural bases for a part of base of said gene, or adding other singular or plural bases to said gene.

15. **(Withdrawn)** The method according to claim 12, wherein A substitutes for the 295th base G in the *SGR* gene of SEQ ID NO:1.

16. **(Withdrawn)** A stay-green mutant plant produced by the method of claim 9.

17. **(Withdrawn)** A method for producing a stay-green mutant plant, which comprises suppressing the expression of the *SGR* gene in yellowing plant.

18. **(Withdrawn)** The method according to claim 17, wherein the *SGR* gene encodes the polypeptide comprising amino acid sequence having at least 60% homology with SGR domain I which is conserved amino acid sequence region of 49~207 among amino acid sequence of SEQ ID NO: 30.

19. **(Withdrawn)** The method according to claim 18, wherein the polypeptide comprises the chloroplast-targeting signal peptide sequence and SGR domain II, and/or SGR domain III which

contains 2~6 conserved glutamines (Qs) in C-terminal region.

20. **(Withdrawn)** The method according to claim 18, wherein the *SGR* gene comprises the base sequence selected from the group consisting of SEQ ID NOs:1 to 21 and 28.

21. **(Withdrawn)** The method according to claim 17, wherein suppressing the expression of the *SGR* gene is performed by gene silencing technique.

22. **(Withdrawn)** A stay-green mutant plant produced by the method of claim 17.

23. **(Withdrawn)** A method for producing a stay-green mutant plant, which comprises the steps of:

(a) obtaining a recombinant vector by introducing a *SGR* gene or a fragment thereof originated from target plant to be mutated, to T-DNA vector; and

(b) transforming a wild type plant with the recombinant vector.

24. **(Withdrawn)** The method according to claim 23, wherein the *SGR* gene encodes the polypeptide comprising amino acid sequence having at least 60% homology with SGR domain I which is conserved amino acid sequence region of 49~207 among amino acid sequence of SEQ ID NO: 30.

25. **(Withdrawn)** The method according to claim 24, wherein the polypeptide comprises the chloroplast-targeting signal peptide sequence and SGR domain II, and/or SGR domain III which contains 2~6 conserved glutamines (Qs) in C-terminal region.

26. **(Withdrawn)** The method according to claim 24, wherein the *SGR* gene comprises the base sequence selected from the group consisting of SEQ ID NOs:1 to 21 and 28.

27. **(Withdrawn)** The method according to claim 23, wherein the *SGR* gene fragment comprises the DNA sequence selected from the group consisting of SEQ ID NOs: 21 to 29.

28. **(Withdrawn)** The method according to claim 23, wherein the T-DNA vector is a vector for

RNAi which induces gene silencing by making the double-stranded RNA (dsRNA) in a transgenic plant.

29. **(Withdrawn)** The method according to claim 23, wherein the recombinant vector comprises CaMV35s promoter or senescence-enhanced promoter.

30. **(Withdrawn)** A stay-green mutant plant produced by the method of claim 23.

31. **(Withdrawn)** A method for producing a stay-green mutant plant, which comprises inactivating the protein encoded by the *SGR* gene in yellowing plant.

32. **(Withdrawn)** The method according to claim 31, wherein the *SGR* gene encodes the polypeptide comprising amino acid sequence having at least 60% homology with SGR domain I which is conserved amino acid sequence region of 49~207 among amino acid sequence of SEQ ID NO: 30.

33. **(Withdrawn)** The method according to claim 32, wherein the polypeptide comprises the chloroplast-targeting signal peptide sequence and SGR domain II, and/or SGR domain III which contains 2~6 conserved glutamines (Qs) in C-terminal region.

34. **(Withdrawn)** The method according to claim 32, wherein the *SGR* gene comprises the base sequence selected from the group consisting of SEQ ID NOs: 1 to 21 and 28.

35. **(Withdrawn)** A stay-green mutant plant produced by the method of claim 31.